



**SONOCO**  
**INSTITUTE**  
CLEMSON® UNIVERSITY

## Introduction to Flexography Workshop

Location: Harris A. Smith Auditorium

---

Day 1

**8:30 Program Overview and Introductions**

**9:00 Presentation: Overview of Major Printing Processes, Flexography**

Litho, Gravure, Screen, Digital, Letterpress and Flexo: Compare and Contrast

**10:00 Hands-On: Print Banded Anilox**

Plate mounting, ink preparation, anilox selection and pressmanship.

**11:30 Presentation: Image Reproduction**

File construction, halftone theory, image terminology

12:15 Lunch

**1:00 Presentation: Inks, Anilox and Doctor Blades**

Ink types and properties, role of the anilox, anilox specifications, and doctor blade configurations

**1:45 Presentation: Density and Tone Value**

Learn how density and tone value are measured.

**2:00 Hands-On: Evaluation of Banded Test**

Measure effect of LPI and anilox volume on color strength and dot gain.

3:15 Break

**3:30 Presentation: Flexographic Platemaking**

Various workflows for making a flexographic printing plate

4:30 End Day

---

## Day 2

- 8:30 Hands-On: Electronics Design, 2-Color**  
Attendees will prepare custom 2-color artwork for printing.
- 10:30 Break
- 10:45 Demo/Hands-On/Presentation: Technical Prepress for Flexo**  
Prepare 2-color design files for printing.
- 11:30 Demo: RIP and Output**  
Setup master file for plate output. Discuss RIP parameters.
- 12:00 Lunch
- 1:00 Hands-On: Platemaking**  
Begin platemaking process for 2-color print job.
- 1:45 Presentation: Color Measurement and Comparison**  
Measuring and defining color with Lab, comparing color with Delta E.
- 2:30 Hands-On: Color Measurement and Comparison**  
Measure and compare color with a spectrophotometer.
- 3:15 Break
- 3:30 Presentation: Press Optimization and Characterization**  
Creating optimized print conditions and conducting a press characterization.
- 4:30 End of Day

---

## Day 3

- 8:30 Hands-On: 2-Color Press Run on OMET**  
Set-up, ink preparation, setting print impression, registration color-to-color, press clean up and measurement.
- 11:00 Hands-On: Pressroom Cleaning and Maintenance**  
Proper techniques for plate and anilox cleaning and storage.
- 12:00 Lunch
- 12:45 Hands-On: Electronic Design for 4-Color Process**  
Create custom artwork for 4-color process print job.

- 2:00 Demo: Prepress and RIP**  
Prepress and RIP files for platemaking.
- 2:45 Hands-On: Platemaking**  
Begin platemaking process for 4-color print job.
- 3:30 Hands-On: Flexo Print Defects**  
Examine and discuss common print defects.
- 4:30 End of Day

---

## Day 4

- 8:30 Hands-On: Platemaking and Mounting**  
Finish plates and mount to sleeves.
- 9:15 Hands-On: 4-Color Process Press Run on OMET**  
Print CMYK job on press, color control for process printing.
- 11:30 Q&A, Recap**
- 11:45 End of Workshop